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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,899	05/08/2002	Juha Pihlaja	4925-220PUS	6826

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EXAMINER

MEHRA, INDER P

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,899

Applicant(s)

PIHLAJA, JUHA

Examiner

Inder P Mehra

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to application dated: 5/8/2002

Specifications

2. The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. For example, the following items are not understood:

Refer to limitation on page 3 lines 25-28, **"If the remaining sequence is longer than the second predetermined length, the length S of the second block is found by subtracting from the length of the remaining sequence the highest integer multiple of the second predetermined length, and the rest of the sequence is split into blocks of length N"**.

It is confusing, because the length of second block is 'S' (refer to specification page 3 line 26) as well as 'N' (refer to "second predetermined length N", specification page 3 line 25).

Refer to page 11 lines 5-10, **"According to a further advantageous embodiment of the invention, ---first block, a second block and at least one thirds block if said sequence -----two predetermined lengths, the two predetermined lengths being the length of the part of the sequence of data transmitted in the first block and the length of a part of the sequence of data transmitted in a third block".** **"third block" should be second block**, because left over data for third block after

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deducting lengths for first block and second block, instead of third block, from total data length.

Applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- a. Claim 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- b. Claim 1 recites the limitation "the first transmitted block" in lines 4 and 5. There is insufficient antecedent basis for this limitation in the claim.
- c. Claim 2 recites the limitation "the part" in lines 2 and 5. There is insufficient antecedent basis for this limitation in the claim.
- d. Claim 4 recites the limitation ""the part" in line 5. There is insufficient antecedent basis for this limitation in the claim.

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e. Claim 7 recites the limitation "the length" in line 5. There is insufficient antecedent basis for this limitation in the claim.

f. Claim 8 recites the limitation "the part" in line 5. There is insufficient antecedent basis for this limitation in the claim.

g. Claim 8 recites the limitation "the second transmission block" in line 3. There is insufficient antecedent basis for this limitation in the claim.

h. Claim 8 recites the limitation "the length" in line 6. There is insufficient antecedent basis for this limitation in the claim.

i. Claim 9 recites, "if said sequence -----two predetermined lengths, the two predetermined lengths being the length of the part of the sequence of data transmitted in the first block and the *length of a part of the sequence of data transmitted in a third block*". "third block"
"third block" should be second block, because left over data for third block after deducting lengths for first block and second block, instead of third block, from total data length.
Appropriate correction or clarification is required.

j. Claim 11 recites the limitation "the length" in line 5. There is insufficient antecedent basis for this limitation in the claim.

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k. Claims 2-6 recite "A method in line 1. Change 'A' to 'the' , because "Method" is preceded by antecedent basis in independent claim 1 line 1.

Appropriate correction or clarification is required.

l. Claims 12 and 13 recite "An access point" in line one. These claims depend on claim 11 which recites "A receiver". Further, claim 13 recites, "an access" in line 1.

There is insufficient antecedent basis for this limitation in the claim.

m. Claims 14 and 15 recite "A terminal" in line one. These claims depend on claim 11 which recites "A receiver".

Appropriate correction or clarification is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1, 7 are rejected under 35 U.S.C. 102(e) as being anticipated by **Petersen** (US Patent No. 6,600,746).

For claims 1 and 7, Petersen discloses, "method for transmission of sequence data", (transmission of telecommunication data, refer to col. 1 lines 5-10), characterized in that:

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- the sequence of data is transmitted in more than one block, refer to abstract, and refer to (counting a number of multi-frames using a sequence number in the start octet), col. 8 lines 55-60;
- the first transmitted block has a pre-determined length, refer to fig. 5 and refer to (length indicator 517 determine the length of each packet), refer col. 5 lines 45-50 and col. 6 lines 11;

the first transmitted block comprises information indicating the length of the sequence of data, refer to “ indicates the number of octets in payload”, refer to col. 2 lines 40-42.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 6, 9 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Petersen** (US Patent No. 6,600,746), as applied to claims 1 and 7 above, and further in view of **Dutta** (US Patent No. 6,463, 040).

For claims 3, 6, and 9, Petersen discloses all the limitations of subject matter, with the exception of the following limitation:

- “at least one transmission block of a third type is transmitted”, as recited by claim 3;
- “microwave radio link”, as recited by claim 6;

- “splitting is arranged to split said sequence of data into a first block, a second second block and at least one third block-----”, as recited in claim 9;

Dutta discloses, “at least one transmission block of a third type is transmitted”, refer to col. 4 lines 38-40; further, discloses, “microwave radio link”, refer to fig. 2 and refer to radio frequency in col. 1 lines 19-26; and “splitting is arranged to split said sequence of data into a first block, a second second block and at least one third block-----”, refer to col. 4 lines 37-40.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of “at least one transmission block of a third type is transmitted”. The capability can be implemented by combining the system as taught by Dutta at the user network interface. The suggestion/motivation to do so would have been to have frame structure comprising both network management data and user message data.

For claims 11-15, Petersen discloses all the limitations of subject matter including limitation, “means for determining the length of said data sequence on the basis of information in said first transmission block, refer to receiver state machine---a length indicator 151 col. 1 lines 62-col. 2 line 13; and further, ”number of octets in the payload”, refer to col. 2 lines 40-42; with the exception of the following limitation:

- means for receiving and decoding a first transmission block comprising a part of a data sequence to be received, as recited in claim 11;
 - means for determining the length of a second transmission block to be received at least partly on the basis of said length of said data sequence, as recited in claim 11;
- and

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- means for determining the number of at least third transmission blocks to be received, if any, as recited in claim 11;
- an access point comprising both transmitter and receiver, as recited in claims 12 and 13;
- a terminal comprising both receiver and transmitter, as recited in claims 14 and 15 respectively.

Dutta disclosing the following limitations:

- means for receiving and decoding a first transmission block comprising a part of a data sequence to be received, as recited in claim 11, refer to col. 2 lines 33-35;
- means for determining the length of a second transmission block to be received at least partly on the basis of said length of said data sequence, as recited in claim 11, refer to col. 4 line 45; and
- means for determining the number of at least third transmission blocks to be received, if any, as recited in claim 11, refer to col. 4 lines 42-44;
- an access point comprising both transmitter and receiver, as recited in claims 12 and 13, refer to “forward and return direction in col. 2 lines 36-38;
- a terminal comprising both receiver and transmitter, as recited in claims 14 and 15 respectively, refer to “forward and return direction in col. 2 lines 36-38.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of “receiver of a microwave link, length of data sequence, length of block, both access point and terminal being transmitter as well as receiver”. The capability can be implemented by combining the system as taught by Dutta at the user network interface.

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The suggestion/motivation to do so would have been to have frame structure comprising both network management data, reassembly of data and user message data.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Petersen** , as applied to claim 1 above, and further in view of **Bharucha et al** (US Patent No. 6,345,056), hereinafter, Bharucha.

For claim 5, Petersen discloses all the limitations of subject matter, with the exception of the following limitation:

- the first transmitted block further comprises information about a parameter of encoding of subsequent blocks;

Bharucha. Discloses, “the first transmitted block further comprises information about a parameter of encoding of subsequent blocks”, refer to abstract, and col. 2 lines 45-46 and col. 3 lines 3-4.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of the first transmitted block further comprises information about a parameter of encoding of subsequent blocks, . The capability can be implemented by combining the system as taught by Bharucha at the user network interface. The suggestion/motivation to do so would have been to have frame structure comprising both network management data, reassembly of data and user message data.

Allowable Subject Matter

9. Claims 2, 4, 8, and 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest the limitations of the following claims:

As recited by claims 2 and 8,

“ the length S of the part of the sequence of data encoded in the second transmission block is $S = (\text{LENGTH} - M) \text{ MOD } N$ ”;

As recited by claims 4 and 10,

“the number F of said transmission blocks of said third type is calculated by $F = \text{INT}((\text{LENGTH} - M)/N)$ ”

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Prior Art

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- Fawas et al (US Patent No. 6,654,374) discloses a packet-switched network providing guaranteed minimum bandwidth.

Conclusion

12. Any enquiry concerning this communication should be directed to Inder Mehra whose telephone number is (703) 305-1985. The examiner can be normally reached on Monday through Friday from 8:30AM to 5:00 PM.

If attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Seema Rao , can be reached on (703) 308-5463. Any enquiry of a general nature of relating to the status of this application or processing should be directed to the group receptionist whose telephone number is (703) 305-4700.

13. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, DC. 20231

Or faxed to (703) 872-9314.

Hand -delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, sixth floor (Receptionist).


Inder Mehra

February 7, 2004


D. W. T. C.
PATENT EXAMINER